

Amendments to the Claims:

1. (Currently Amended) A medical appliance for placement within a portion of the anatomy of a patient, the appliance comprising:

a scaffolding, the scaffolding configured to define a substantially cylindrical member having a distal end and a proximal end and extending longitudinally there between, forming a lumen there through, along the longitudinal extension of the appliance the scaffolding having an interior and an exterior surface comprising struts ~~with geometrical patterns formed by angles, wherein the angles determine the relative flexibility of the medical appliance such that the appliance conforms to the topography of a target lumen and when pressure is exerted along varying points of the longitudinal extension of the appliance, the appliance does not undesirably foreshorten or elongate;~~

a coating coupled with the scaffolding such that the exterior surface of the scaffolding is raised with respect to the coating extending over at least a portion of an area between the struts of the scaffolding.

2. (Currently Amended) The medical appliance of claim 2, wherein the ~~scaffolding further comprises a coating~~ is coupled with the scaffolding such that both the struts and the area between the struts are coated, the coating of sufficient thickness to prevent the medical appliance from becoming epithelialized when installed in the desired portion of the patient's anatomy.

3. (Original) The medical appliance of claim 2, wherein the coating is substantially hydrophobic.

4. (Original) The medical appliance of claim 2, wherein the coating is substantially hydrophilic.

5. (Original) The medical appliance of claim 3, wherein the coating is hydroscopic.

6. (Original) The medical appliance of claim 4, wherein the coating is substantially hydroscopic.

7. (Original) The medical appliance of claim 1, wherein at least one strut defines an aperture there through.

8. (Original) The medical appliance of claim 7, wherein the at least one aperture defines an eyelet of sufficient diameter to receive suture.

9. (Original) The medical appliance of claim 8, wherein the eyelet diameter is at least 300 μm .

10. (Original) The medical appliance of claim 2, wherein the coating does not inhibit flexing or radial expansion of the medical appliance.

11. (Original) The medical appliance of claim 10, wherein the coating is coupled with the medical appliance from the interior surface of the scaffolding outward.

12. (Original) The medical appliance of claim 11, wherein the coating is coupled with the medical appliance from the exterior surface of the scaffolding inward.

13. (Original) The medical appliance of claim 2, wherein the coating is coupled with the medical appliance from the exterior surface of the scaffolding inward.

14. (Currently Amended) The medical appliance of claim 13, wherein the coated struts on the exterior surface of the scaffolding are raised with respect to the coated ~~region~~ area between the struts of the medical appliance.

15. (Currently Amended) The medical appliance of claim 14, wherein the coated strut is raised between 1 \AA to 10^6 \AA with respect to the coated ~~region~~ area between the struts of the medical appliance.

16. (Currently Amended) The medical appliance of claim 14, wherein the relative extent to which the coated struts are raised with respect to the coated ~~regions~~ areas between the struts is sufficient to allow cilia function at the cite of implantation.

17. (Original) The medical appliance of claim 1, wherein the dimensions of the scaffolding geometry determine torsionality of the medical appliance.

18. (Original) The medical appliance of claim 1, wherein the scaffolding is formed of a memory capable alloy.

19. (Original) The medical appliance of claim 18, wherein the scaffolding is electropolished.

20. (Original) The medical appliance of claim 1, wherein along the longitudinal expanse of the scaffolding the medical appliance further comprise a plurality of flanges that define apertures there through.

21. (Original) The medical appliance of claim 1, further comprising a connector coupled with portions of the geometrical patterns, the connector comprising a crossing member and a plurality of leg members extending from the crossing member.

22. (Original) The medical appliance of claim 21, wherein the connector further comprises a rectangular detent extending from a leg thereof.

[[24]] 23. (Currently Amended) The medical appliance of claim 21, wherein ~~the~~ a length of the leg members and ~~the degree of the an~~ angle at which the legs extend from the crossing member determines the relative flexibility of the medical appliance.

[[25]] 24. (Currently Amended) The medical appliance of claim 23, wherein the angle at which the leg members extend from the crossing member is greater than 90°.

[[26]] 25. (Currently Amended) The medical appliance of claim [[25]] 24, wherein the medical appliance is relatively rigid.

[[27]] 26. (Currently Amended) The medical appliance of claim [[25]] 23, wherein the angle at which the leg members extend from the crossing member is 90° or less.

[[28]] 27. (Currently Amended) The medical appliance of claim 26, wherein the medical appliance is relatively flexible.

[[29]] 28. (Currently Amended) The medical appliance of claim 1, further comprising an additional distal end wherein the medical appliance forms a substantially Y-shape.

[[30]] 29. (Currently Amended) The medical appliance of claim [[29]] 28, wherein the additional distal end comprises scaffolding having at least one strut ~~defines~~ defining an aperture there through.

[[31]] 30. (Currently Amended) The medical appliance of claim [[30]] 29, wherein the at least one aperture defines an eyelet of sufficient diameter to receive suture.

[[32]] 31. (Currently Amended) The medical appliance of claim [[31]] 30, wherein the eyelet diameter is at least 300 μm .

[[33]] 32. (Currently Amended) The medical appliance of claim [[29]] 28, wherein along ~~the a~~ longitudinal ~~extension~~ axis of the medical appliance and the additional distal end, the scaffolding forms geometrical patterns.

[[34]] 33. (Currently Amended) The medical appliance of claim [[33]] 32, wherein the scaffolding further comprises a coating coupled with the scaffolding, the coating of sufficient thickness to prevent the medical appliance from becoming epithelialized when installed in the desired portion of the patient's anatomy.

[[35]] 34. (Currently Amended) The medical appliance of claim [[34]] 33, wherein the dimensions of the scaffolding geometry determine torsionality of the medical appliance.

[[36]] 35. (Currently Amended) The medical appliance of claim [[35]] 34, wherein the scaffolding is formed of a memory capable alloy.

[[37]] 36. (Currently Amended) The medical appliance of claim [[35]] 34, wherein the scaffolding is electropolished.

[[38]] 37. (Currently Amended) The medical appliance of claim [[34]] 33, wherein near the distal and proximal ends of the scaffolding the medical appliance further comprise a plurality of flanges that define apertures there through.

[[39]] 38. (Currently Amended) The medical appliance of claim [[29]] 28, further comprising a connector member coupled with portions of the geometrical patterns, the connector comprising a crossing member and a plurality of leg members extending from the crossing member.

[[40]] 39. (Currently Amended) The medical appliance of claim 38, wherein the connector further comprises a rectangular detent extending from a leg thereof.

[[41]] 40. (Currently Amended) The medical appliance of claim [[39]] 38, wherein ~~the~~ a length of the leg members or ~~the~~ a degree of ~~the~~ an angle at which the legs extend from the crossing member positively contributes to the relative flexibility of the medical appliance.

[[42]] 41. (Currently Amended) The medical appliance of claim [[41]] 40, wherein the angle at which the leg members extend from the crossing member is greater than 90°.

[[43]] 42. (Currently Amended) The medical appliance of claim [[42]] 41, wherein the medical appliance is relatively rigid.

[[44]] 43. (Currently Amended) The medical appliance of claim [[41]] 40, wherein the angle at which the leg members extend from the crossing member is 90° or less.

[[45]] 44. (Currently Amended) The medical appliance of claim [[44]] 43, wherein the medical appliance is relatively flexible.

[[46]] 45. (Currently Amended) A method of coating a medical appliance, comprising the steps of:

providing a mold having an internal and an external diameter;

providing a medical appliance comprising a scaffolding, the scaffolding configured to define a substantially cylindrical member having a distal end and a proximal end and extending longitudinally there between, forming a lumen there through, along the longitudinal extension of the appliance the scaffolding having an interior and an exterior surface ~~with geometrical patterns formed by angles, wherein the angles determine the relative flexibility of the medical appliance such that the appliance conforms to the topography of a target lumen and when pressure is exerted along varying points of the longitudinal extension of the appliance, the appliance does not undesirably foreshorten or elongate;~~

inserting the medical appliance into the internal diameter of the mold;
applying a polymer to the interior surface of the medical appliance; and
annealing the polymer to the stent by applying heat to the polymer.

[[47]] 46. (Currently Amended) The method of claim [[46]] 45, further comprising the step of applying a polymer to the exterior surface of the medical appliance.

[[48]] 47. (Currently Amended) The ~~medical appliance~~ method of claim [[46]] 45, ~~further wherein providing comprises providing a medical appliance further comprising an~~ additional distal end wherein the medical appliance forms a substantially Y-shape.

48. (New) The method of claim 45, wherein applying comprises applying the polymer such that the exterior surface of the scaffolding is raised with respect to the polymer applied over at least a portion of an area between the scaffolding.

49. (New). The method of claim 45, further comprising spraying the medical appliance with a polymer prior to applying the polymer to the interior surface of the medical appliance.